

# S 217-OEM DEW POINT SENSOR (-50 °C ... +50 °C)



The CS-ITEC dew point sensor S 217 provides reliable and long term stable dew point monitoring in industrial applications. The newly developed sensor features improved signal and stability in demanding industrial applications.

It's designed for OEM applications in desiccant and refrigeration dryers. Through our new sensor technology paired with a compact casing, S 217-OEM can be offered at very attractive prices. This allows applications in smaller dryers and point of use dryers using a more energy efficient dew point control.

The measured dew point is output via the loop-powered 4 ... 20 mA signal or 3 wire 4 ... 20 mA output. Sensor parameters such as analogue output scaling, physical units, can be set ex factory.

#### Stated accuracy under following conditions:

- Ambient temperature 23 °C ±3 °C
- Process temperature 23 °C ±3 °C
- Ambient humidity < 95%, no condensation
- Airflow > 1 l/min at sensor tip

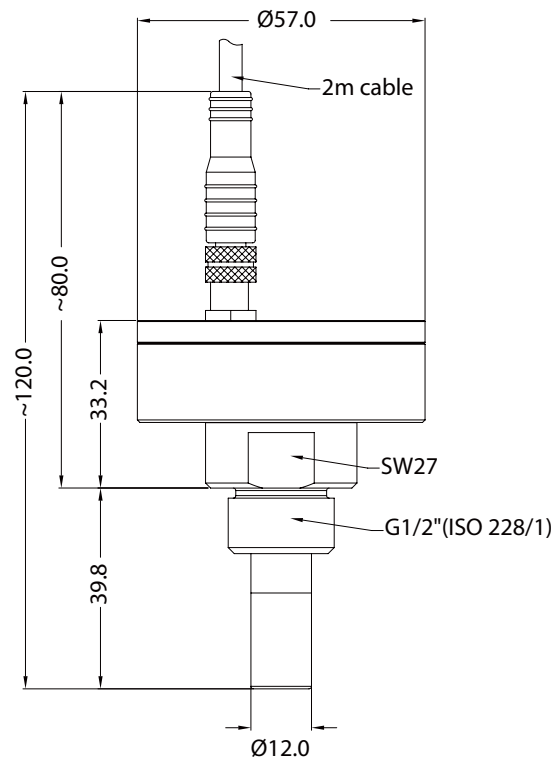
## Features

- Small size makes it ideal for dryer installations
- Measures dew points down to -50 °C
- 2-wire or 3-wire output
- IP 65 casing provides robust protection in rough industrial environment
- Very fast response time ensures safe and reliable indication whenever dew points are out of valid ranges
- Can be installed directly into dryers through G 1/2" thread
- High accuracy of 1 °C ... 2 °C dew point
- Withstands condensation
- M8 connector and cable with open wires

### Technical data S 217

Measuring range	-50 °C ... +20 °C -20 °C ... +50 °C
Accuracy	1 °C (-5 °C ... +10 °C) 2 °C (remaining range)
Pressure range	-0.1 ... 5.0 MPa -0.1 ... 35 MPa (optional)
Power supply	12 ... 30 VDC
Measured gas	Non-corrosive gases
Ambient conditions	-10 °C ... 50 °C
Transport temperature	-30 °C ... +70 °C
Response time t90	< 30 sec (descending) < 10 sec (ascending)
Output signal	4 ... 20 mA, 2-wire 4 ... 20 mA, 3-wire
Cable	M8 connector, 1.8 m, open wires, 3 pole
Wire sizes	Terminals support 0.14 ... 0.25 mm <sup>2</sup>
Casing	Process connection: stainless steel Casing: Al alloy
Classification	IP 65
Process connection	G 1/2" thread (ISO 228/1)
Sensor protection	Stainless steel sinter filter pore size <30 um
EMC	According to IEC 61326-1

## Dimensions



Order no.	Description
S699 2170	S 217-0, dew point sensor, 4 ... 20 mA (2-wire), -50 °C ... +20 °C, G 1/2" thread, 50 bar, M8
S699 2173	S 217-3, dew point sensor, 4 ... 20 mA (2-wire), -20 °C ... +50 °C, G 1/2" thread, 50 bar, M8
S699 2174	S 217-4, dew point sensor, 4 ... 20 mA (3-wire), -20 °C ... +50 °C, G 1/2" thread, 50 bar, M8
S699 2175	S 217-5, dew point sensor, 4 ... 20 mA (3-wire), -50 °C ... +20 °C, G 1/2" thread, 50 bar, M8
A1390	S 217, customized measuring range
A1391	S 217, high pressure option 35 MPa (350 bar)
A554 2005	Service kit for sensor configuration including software
A699 3491	Measuring chamber for easy installation in compressed air system up to 15 bar
A699 3493	Measuring chamber bypass type (in and out 6 mm hose connection)
C198 0002	Sinter cap stainless steel